

CITY OF SAN ANTONIO
Planning and Development Services Department
M E M O R A N D U M

TO: PDSO Customers

FROM: Roderick J. Sanchez, Director and Building Official

DATE: October 5, 2009

FILE: Code Interpretations Manual

INTERPRETATION NUMBER: CI2009-006

TITLE: Duct Testing for Altered, Extended or Repaired Systems

CODE/EDITION: City Sustainable Building Ordinance (SBO) 2009-03-12--0179
2009 International Energy Conservation Code (IECC)
2009 International Residential Code (IRC)
2009 International Mechanical Code (IMC)

SECTION(S): SBO 402.8
IECC 403.2.2
IRC R109.1.2
IMC 107.3.1

PURPOSE: To clarify the extent and scope of work required for alterations, extensions and repairs of ducts.

QUESTION: Is it required that a duct test for leakage be performed for an existing duct system when a portion of that system is altered, extended or repaired?

ANSWER: No. Section 402.8 of the Sustainable Building Ordinance modifying Section 107.2.1 of the 2006 IMC, and Section 107.3.1 of the 2009 IMC indicate that alterations, renovation and repairs of ducts shall be tested as indicted herein to disclose leaks. This language remains the same from the 2006 to the 2009 IMC. The existing language does not create or change current department policy regarding construction, testing and inspection requirements. The new language added to section 107 by the SBO requires that duct systems for new R-3 residential occupancies be tested for leakage if outside the conditioned space. Testing for duct leakage is indicated for new home construction only. Section 403.2.2 of the 2009 IECC and Section R109.1.2 of the 2009 IRC indicate how these tests for new construction are to be accomplished.

Planning and Development Services (PDSO) recognizes that not all portions

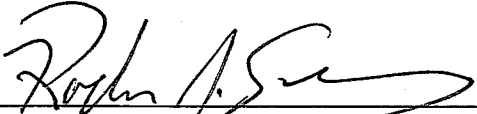
of an existing duct system are accessible and existing leaks correctable. Section 102.4 of the 2009 IMC, Section R107.2.1 of the 2009 IRC exempts the existing unaltered duct system from complying with these requirements. PDSD recognizes that an entire duct system or an entire branch line would need to be replaced in order to apply the requirement of duct testing for that new system or branch line. PDSD also recognizes that mastics used for a portion of a duct altered or repaired creates relatively leak free joints and that the new portion of an existing duct will in all likelihood have less leakage than the old portion repaired or replaced.

QUESTION: Is it required that a duct test for leakage be performed on the duct system if the entire system is replaced for an existing home?

ANSWER: Yes. If the entire HVAC system is demolished and rebuilt, and located in unconditioned space, then the system is considered new and must comply with current code requirements regarding leakage.

QUESTION: Is it required that a duct test for leakage be performed for a new duct system that serves a new building addition from a new or existing HVAC air handler in order to pass inspections?

ANSWER: Yes. The 2009 IECC Section 101.4.3 requires that the addition alone comply with the code. The new duct system only is required to be tested. Existing portions of the HVAC duct system are exempt from the testing requirement.



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